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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

1 October 1992

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Comments in the Matter of
an amendment to

PR Docket No. 92-136

Amendment of Part 97 of the)
Commission's Rules to Relax)
Restrictions on the Scope of)
Permissible Communications)
in the Amateur Service)

Gentlemen:

After an intensive review of the referenced NPRM, we fully endorse its spirit and meaning. In addition, we would further propose an amendment which would assist the largely volunteer national and local search and rescue organizations.

To expand amateur radio public service activities, we propose to specifically allow amateur radio stations to retransmit the audio from Emergency Locator Transmitters (ELTs) and Emergency Position Indicating Radio Beacons (EPIRBs). This would alert search and rescue people to the presence of a distress signal and assist in its identification and location.

We request that under the provisions for modification that Section 97.113 (4) (e) of Part 97 of Chapter 1 of Title 47 of the Code of Federal Regulations be amended as follows:

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(e) No station shall retransmit programs or signals emanating from any type of radio station other than an amateur station, except **a distress signal for alarm and identification purposes**, propagation and weather forecast information originating from United States Government stations, and communications originating on United States Government frequencies between a space shuttle and its associated Earth stations. Prior approval for such retransmissions must be obtained from the National Aeronautics and Space Administration. Such retransmissions must be for the exclusive use of amateur operators. Propagation, weather forecasts, and shuttle retransmissions may not be conducted on a regular basis, but only occasionally, as an incident of normal amateur radio communications.

We are well aware that upwards of 95% of all ELT/EPIRB signals are not caused by a real distress situation. However, the nature of a particular alarm can be determined only by locating the source. Even if the signal is non-distress or not from an ELT/EPIRB, it is important to shut it off so that it does not obscure a real emergency.

In an emergency, prompt assistance is critical for victim survival. The COSPAS/SARSAT system requires at least two satellite passes for location. Current operating doctrine requires at least 3 passes in the absence of other information because of the high non-distress alarm rate. This means that 12 hours may pass before rescue forces are alerted. Most distress signals start in daylight so this delay means searches are often done at night and at added risk.

Besides the satellites, military and FAA facilities and some aircraft in flight listen on the emergency frequencies. In fact, these receivers, with squelch thresholds set up for short range communications with 10-40 watt transmitters, miss a majority of weak signals from 75 mW ELTs.

A ground based monitor system using sensitive receivers at amateur repeater sites or homes near airports cannot replace the satellites but it can provide rapid, economical local response in metropolitan areas where most incidents occur. This can reduce the alarm load and potentially improve the satellite system response time. The system in Santa Barbara, CA, described in attachment 1, reduced the AFRCC coordinated missions from an average of one every three weeks in the year before its installation to only two in over three years since.

The very sensitive ELT receivers necessary to provide reasonable coverage are subject to false alarms due to noise, intermodulation interference, stuck transmitters, and other non-emergency sources. Because the system is used directly to mobilize search forces, positive identification is required. Retransmission of 5 to 15 seconds of the received audio on command provides this identification. It can also aid in location. For example, an upward sweep indicates a 406 MHz EPIRB; fading indicates a moving (and probably non-distress) target, and multiple beacons can be resolved by sound.

It is possible to use other frequencies for interrogation of an ELT monitor. To be economically reasonable, a monitor must share a channel with some other service. Monitors have been placed on sheriff, highway patrol and other government frequencies and on military and Civil Air Patrol equipment. However, it is a rare agency that will consider a "non-essential" function in its system in these days of tight money and concern about liability. There are far more amateur than CAP repeaters, with many run by technically innovative people.

An amateur radio link has one added advantage. Many rescue teams have amateurs as members or use the Amateur Radio Emergency Service (ARES) for communication. Often during a search, teams lose the ELT signal. A monitor can be interrogated immediately to see if the signal has changed, disappeared, or is still on the air.

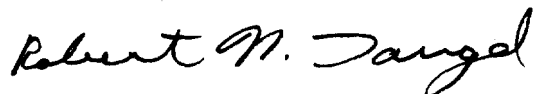
In summary, we feel that the proposed amendment, or a similar one with the same effect, will give the amateur community an opportunity to make a substantial contribution to search and rescue with little potential for abuse and trivial use of air time compared to uses already permitted. The use concerns the immediate safety of life and property and the transmissions are unscheduled, occasional and short. This use fits the spirit of paragraph 97.1 (a) and 97.403 as well as the stated intent of this NPRM.

L-Tronics



Bruce E. Gordon
Chief Engineer

Santa Barbara Amateur Radio Club.



Robert Tangle
Director of Emergency Services

Attachment 1.

During the past three years, L-Tronics has sponsored an ELT monitoring network in the Santa Barbara area consisting of five receivers on 121.5 MHz that both report to a central logging computer and, in two cases, broadcast an alert. One alert is on a Civil Air Patrol (CAP) repeater and one is on a local amateur radio repeater, K6TZ, operated by the Santa Barbara Amateur Radio Club. Two city sites and the CAP repeater have DF capability.

The information from the system is used primarily by the local sheriff to dispatch emergency response teams. Since its installation, the system has reported every actual emergency signal and permitted the location and shut down of all but two accidental activations before the Coast Guard or AFRCC declared a mission. In addition, the DF capability allows rapid identification of moving targets, curtailing response on a clearly non-distress situation. A summary list is attached.

FAA and Coast Guard stations never heard most of the signals on the attached list and the satellite system delays were 5 to 10 hours. The monitor system responds in 10 minutes and emergency field teams are usually dispatched in less than 30 minutes. Note that no signals started between 2300 and 0400 local time, so most searches were in daylight.

An important part of the operation of the receivers at the repeater sites is the ability to request a retransmission of the ELT signal for verification because the system is sometimes triggered by non-ELT noise or carrier signals. The local amateur repeater transmits only paging tones and a computer voice message automatically. The CAP repeater also automatically transmits 7 seconds of ELT audio. Both will transmit 15 seconds of audio upon manual request whether an alarm has been sent or not.

Because the ELT's only purpose is to transmit an emergency or distress signal, we relied on the various provisions of the FCC rules regarding emergency communications as the basis for this operation.

SANTA BARBARA E.L.T. MONITORING SYSTEM

ACTIVITY SUMMARY SINCE 2 JULY 1989

TOTAL ALARMS:.....204
ELT/EPIRB:.....161
CARRIER: 43

ELT/EPIRB ALARMS:

ACTUAL AVIATION EMERGENCY: 6
ACTUAL MARINE EMERGENCY: 3
LOCATED ON AN AIRPORT: 31
LOCATED AT A HARBOR: 13
LOCATED OFF AIRPORT/HARBOR: 7
(1 ELT caused 4 alarms)
OFFSHORE (INCLUDES MOVING): 17
AIRBORNE MOVING: 55
FADED OUT: 19
OTHER/UNKNOWN SOURCES: 10

+ 1 ELT which malfunctioned and emitted carrier-only signal

SANTA BARBARA E.L.T. MONITORING SYSTEM

E.L.T. ALERTS BY TIME

Alarm Time

0000-0100	
0100-0200	
0200-0300	
0300-0400	
0400-0500.....	2
0500-0600	
0600-0700.....	3
0700-0800.....	7
0800-0900.....	4
0900-1000.....	7
1000-1100.....	13
1100-1200.....	5
1200-1300.....	14
1300-1400.....	17
1400-1500.....	18
1500-1600.....	18
1600-1700.....	10
1700-1800.....	9
1800-1900.....	12
1900-2000.....	7
2000-2100.....	5
2100-2200.....	8
2200-2300.....	2
2300-0000	

You see, we sleep at night because we get 'em during the day!

SANTA BARBARA E.L.T. MONITORING SYSTEM

RECORD OF ALARMS SINCE 2 JULY 1989

DATE	TIME (L)	TYPE SIGNAL	REMARKS
07-02-89	1320	ELT/EPIRB	Free-floating EPIRB 22 miles offshore of Santa Barbara.
07-03-89	0700	Carrier	US Navy ship in San Diego area.
07-03-89	1336	Carrier	US Navy ship in San Diego area.
07-03-89	1540	Carrier	US Navy ship in San Diego area.
07-12-89	1544	Carrier	US Navy ship in San Diego area.
07-13-89	0922	ELT/EPIRB	Boat moving near shoreline off Santa Barbara.
07-13-89	1317	ELT/EPIRB	"Chirpy" & weak ELT/EPIRB; faded out.
08-01-89	0622	ELT/EPIRB	Airborne moving.
08-01-89	1739	Carrier	San Clemente Island (US Navy?).
08-05-89	1625	Carrier	Pt. Mugu area; voice testing; US Navy?
08-18-89	0857	ELT/EPIRB	Airborne moving.
08-30-89	1539	Carrier	Unknown source.
08-31-89	1241	ELT/EPIRB	Very weak; faded out.
09-07-89	2055	ELT/EPIRB	Had both weak ELT/EPIRB and strong carrier.
09-07-89	2055	Carrier	Carrier from US Navy off San Clemente prevented DF on weak ELT/EPIRB signal, which faded out.
09-12-89	1018	Carrier	San Clemente Island (US Navy?).
09-25-89	1210	Carrier	Unknown source; slight tone modulation heard.
10-24-89	2043	Carrier	Unknown source; strong carrier to west.
10-26-89	1851	ELT/EPIRB	Vessel in motion south of Channel Islands.
10-29-89	1828	Carrier	Unknown source; strong carrier to west.
11-12-89	2150	ELT/EPIRB	Strong signal from crashed airplane at Camarillo, 50 miles SE of Santa Barbara. 1 fatality. ELT instrumental in find.
11-15-89	1305	ELT/EPIRB	ELT on Santa Barbara Airport.
11-15-89	1636	ELT/EPIRB	ELT on Santa Barbara Airport.
11-28-89	0935	ELT/EPIRB	Airborne moving.
12-16-89	1316	ELT/EPIRB	Off shoreline of Santa Barbara.
12-23-89	1057	ELT/EPIRB	ELT on Santa Barbara Airport.
12-29-89	1902	ELT/EPIRB	Downed aircraft 2 miles north of Santa Barbara Airport; 3 survivors. Not an ELT find.
12-30-89	1626	ELT/EPIRB	Airborne moving.
01-23-90	0705	ELT/EPIRB	Located in residence in Santa Barbara.
02-26-90	1436	ELT/EPIRB	Weak signal faded out.
02-08-90	1355	ELT/EPIRB	Strong signal; went off abruptly.
02-08-90	1530	ELT/EPIRB	Strong signal; went off abruptly.
02-09-90	0751	ELT/EPIRB	Strong signal; went off abruptly.
02-09-90	0942	ELT/EPIRB	ELT located in pilot's residence in Goleta. Was responsible for above 3 alarms.
02-10-90	1450	ELT/EPIRB	Weak signal faded out.
03-05-90	1433	ELT/EPIRB	EPIRB at Santa Barbara Harbor; mailed from San Diego.
03-06-90	1532	ELT/EPIRB	ELT on Santa Barbara Airport.
03-07-90	0648	ELT/EPIRB	ELT on Santa Barbara Airport.

DATE	TIME (L)	TYPE SIGNAL	REMARKS
03-09-90	1325	ELT/EPIRB	Weak signal faded out.
03-25-90	1815	ELT/EPIRB	Weak signal faded out.
04-14-90	1930	ELT/EPIRB	Weak signal faded out.
04-15-90	1510	ELT/EPIRB	Weak signal faded out.
04-27-90	1015	ELT/EPIRB	EPIRB offshore; moving.
05-03-90	1806	ELT/EPIRB	Offshore moving.
05-05-90	0720	Carrier	Santa Catalina Island; voice testing.
05-14-90	0759	ELT/EPIRB	Airborne moving.
05-17-90	1514	ELT/EPIRB	Airborne moving.
05-27-90	1416	ELT/EPIRB	Capsized vessel 18 miles offshore; 2 rescued.
06-01-90	1905	ELT/EPIRB	ELT in nearly-loaded moving van in Santa Barbara.
06-11-90	0702	Carrier	Strong carrier; weak ELT also heard through carrier, which was from US Navy ship at San Diego; ran for 24 hours. Two ELTs and 1 missing aircraft reported during this time.
06-14-90	1928	ELT/EPIRB	ELT located at Camarillo Airport.
06-27-90	0712	ELT/EPIRB	EPIRB at Santa Barbara Harbor.
07-07-90	1220	ELT/EPIRB	Airborne moving.
07-13-90	1854	ELT/EPIRB	Airborne moving.
07-23-90	1930	ELT/EPIRB	Two signals, probably EPIRBS; both out of county.
07-24-90	0634	ELT/EPIRB	Weak signal faded out.
07-27-90	1541	Carrier	Santa Catalina Island; strong signal.
08-02-90	1434	ELT/EPIRB	ELT at Santa Barbara Harbor.
08-08-90	1707	ELT/EPIRB	Airborne moving.
08-08-90	2034	ELT/EPIRB	Offshore moving.
08-20-90	1353	ELT/EPIRB	Airborne moving.
09-07-90	1800	ELT/EPIRB	Aircraft crash west of Santa Barbara Airport. Throttle cable broke, 2 POB, no injuries; aircraft flipped. Not an ELT find.
09-09-90	1300	ELT/EPIRB	Airborne moving.
09-20-90	0405	ELT/EPIRB	EPIRB at Santa Barbara Harbor.
10-01-90	1416	ELT/EPIRB	ELT at Santa Barbara Airport.
10-11-90	1310	ELT/EPIRB	Offshore moving.
10-17-90	1813	ELT/EPIRB	ELT at Santa Barbara Airport.
10-19-90	1154	ELT/EPIRB	ELT at Santa Barbara Airport.
10-21-90	1800	ELT/EPIRB	Aircraft crash east of Santa Barbara Airport. 4 POB, 1 fatality. Low approach, caught gear on power lines, flipped into building. Not an ELT find.
10-26-90	1344	ELT/EPIRB	ELT located at Camarillo Airport.
10-27-90	1352	ELT/EPIRB	Weak, strange-sounding (damaged?) EPIRB offshore.
10-29-90	1300	ELT/EPIRB	Strange-sounding (damaged?) ELT/EPIRB (not same as above).
10-30-90	1444	ELT/EPIRB	Offshore moving.
11-04-90	1034	ELT/EPIRB	Weak signal faded out.
11-25-90	1706	Carrier	Offshore.
11-30-90	2143	ELT/EPIRB	406 EPIRB at Santa Barbara Harbor.
12-04-90	1019	ELT/EPIRB	Weak signal faded out
12-04-90	1444	Carrier	Unknown source.
12-29-90	1440	Carrier	Unknown source.
01-05-91	1049	ELT/EPIRB	ELT at Santa Barbara Airport.
01-12-91	1453	ELT/EPIRB	ELT at Santa Barbara Airport.
01-23-91	1735	ELT/EPIRB	Airborne moving.
01-29-91	1516	ELT/EPIRB	EPIRB at Santa Barbara Harbor.

DATE	TIME (L)	TYPE SIGNAL	REMARKS
02-01-91	1037	ELT/EPIRB	EPIRB at Ventura Marina.
02-08-91	1955	ELT/EPIRB	406 EPIRB unknown location; went off abruptly.
02-11-91	1328	ELT/EPIRB	Offshore moving.
02-12-91	1554	Carrier	Carrier with some tone modulation; unknown source.
02-13-91	1208	ELT/EPIRB	Airborne moving.
02-21-91	1017	Carrier	Strong carrier; unknown source; possibly US Navy Desert Storm replacement ships in San Diego.
02-24-91	1459	Carrier	Unknown source.
02-26-91	1324	Carrier	Unknown source.
02-28-91	1357	Carrier	Unknown source.
03-01-91	1520	Carrier	Unknown source.
03-02-91	1258	Carrier	Unknown source.
03-02-91	1139	ELT/EPIRB	Airborne moving.
03-02-91	1450	ELT/EPIRB	Airborne moving.
03-03-91	2110	ELT/EPIRB	Probably EPIRB southwest of Los Angeles.
03-19-91	0751	Carrier	San Clemente Island.
03-26-91	1145	Carrier	Unknown source.
03-30-91	0846	ELT/EPIRB	Airborne, probably landed at Santa Barbara Airport.
03-31-91	1508	ELT/EPIRB	Airborne moving.
04-01-91	1557	ELT/EPIRB	Airborne moving.
04-09-91	0902	ELT/EPIRB	Airborne moving.
04-13-91	0820	ELT/EPIRB	Airborne moving.
04-13-91	1838	ELT/EPIRB	Airborne moving.
04-18-91	1606	ELT/EPIRB	Airborne moving.
05-09-91	1230	ELT/EPIRB	ELT at Santa Barbara Airport.
05-15-91	2041	ELT/EPIRB	406 EPIRB. Fishing boat went aground at Gaviota; salvage operations knocked EPIRB overboard.
05-16-91	1435	ELT/EPIRB	Airborne moving; probably started at Santa Barbara.
05-17-91	1539	ELT/EPIRB	Weak signal faded out.
05-17-91	2151	ELT/EPIRB	Airborne moving.
05-24-91	1027	ELT/EPIRB	Airborne moving.
05-31-91	0931	ELT/EPIRB	Airborne moving.
06-01-91	1455	ELT/EPIRB	Airborne moving.
06-05-91	1416	Carrier	Malfunctioning ELT at Santa Barbara Airport.
06-09-91	1230	ELT/EPIRB	Airborne moving.
06-12-91	1234	ELT/EPIRB	ELT at Santa Barbara Airport.
06-22-91	0838	ELT/EPIRB	Airborne moving.
06-27-91	2108	ELT/EPIRB	Airborne moving.
07-07-91	1401	ELT/EPIRB	Airborne moving.
07-08-91	1043	ELT/EPIRB	Airborne moving.
07-13-91	1631	ELT/EPIRB	Airborne moving.
07-14-91	1528	ELT/EPIRB	Airborne moving.
07-14-91	2157	ELT/EPIRB	EPIRB at Pt. Hueneme.
07-16-91	1145	ELT/EPIRB	Airborne moving.
07-16-91	1540	ELT/EPIRB	Airborne moving.
07-16-91	1700	ELT/EPIRB	Airborne moving.
07-18-91	1842	ELT/EPIRB	ELT at Santa Barbara Airport.

DATE	TIME (L)	TYPE SIGNAL	REMARKS
07-24-91	1330	ELT/EPIRB	Airborne moving.
07-25-91	0903	ELT/EPIRB	Airborne moving.
07-26-91	1512	ELT/EPIRB	Airborne moving.
07-26-91	1550	Carrier	FAA transmitter on La Cumbre Peak.
07-28-91	1309	ELT/EPIRB	Unknown source.
07-28-91	1834	Carrier	Offshore moving.
07-30-91	1416	ELT/EPIRB	Aircraft on Santa Barbara Airport taxiing to takeoff.
08-05-91	0658	Carrier	Unknown source.
08-05-91	1452	ELT/EPIRB	Unknown source.
08-06-91	1729	Carrier	Offshore moving.
08-13-91	1220	Carrier	Offshore.
08-31-91	1731	ELT/EPIRB	EPIRB at Santa Barbara Harbor dry dock.
09-03-91	1729	Carrier	Navy ship in San Diego Harbor.
09-05-91	1157	ELT/EPIRB	EPIRB on oil platform Habitat.
09-23-91	1955	ELT/EPIRB	ELT at Santa Barbara Airport.
09-28-91	1327	ELT/EPIRB	Airborne moving.
10-15-91	1259	ELT/EPIRB	Airborne moving.
10-22-91	1515	Carrier	Unknown.
10-26-91	0914	ELT/EPIRB	ELT at Santa Barbara Airport.
11-01-91	1155	ELT/EPIRB	Airborne moving.
11-04-91	1056	ELT/EPIRB	Probably Oxnard Airport.
11-04-91	1627	ELT/EPIRB	ELT at Santa Barbara Airport.
11-11-91	1725	ELT/EPIRB	Airborne moving.
11-13-91	0715	ELT/EPIRB	ELT at Santa Barbara Airport.
11-17-91	1205	ELT/EPIRB	Airborne moving.
11-17-91	1420	ELT/EPIRB	Airborne moving.
11-18-91	0446	ELT/EPIRB	ELT at Santa Barbara Airport.
11-28-91	1251	ELT/EPIRB	Unknown. Off the air before located.
12-03-91	1603	ELT/EPIRB	Unknown. Off the air before located.
12-03-91	1749	ELT/EPIRB	Airborne moving.
12-04-91	1624	ELT/EPIRB	Airborne moving.
12-05-91	1506	ELT/EPIRB	Faded out.
12-12-91	2004	ELT/EPIRB	Faded out.
12-16-91	1520	ELT/EPIRB	ELT at Santa Barbara Airport.
12-27-91	2158	ELT/EPIRB	ELT at Santa Barbara Airport.
12-29-91	1231	ELT/EPIRB	ELT at Santa Barbara Airport.
01-03-92	1654	ELT/EPIRB	Airborne moving.
01-03-92	1815	ELT/EPIRB	406 MHz EPIRB at Santa Barbara Harbor.
01-04-92	1642	ELT/EPIRB	Airborne moving.
01-10-92	1145	Carrier	Santa Cruz Island.
01-12-92	1245	ELT/EPIRB	ELT at Santa Barbara Airport
02-09-92	1712	ELT/EPIRB	406 MHz EPIRB in surf below Shoreline Park vessel that broke up in storm.
02-22-92	2030	ELT/EPIRB	Airborne moving.
02-25-92	1014	ELT/EPIRB	Airborne moving back and forth for 2 hours.
03-02-92	1527	ELT/EPIRB	Airborne moving.
03-03-92	1325	ELT/EPIRB	Faded out.
03-05-92	2222	ELT/EPIRB	Airborne moving.
03-13-92	1108	ELT/EPIRB	ELT at Pt. Mugu
03-13-92	1108	Carrier	Located at Pt. Mugu. Deactivated 3/14/92 1400 hours.

DATE	TIME (L)	TYPE SIGNAL	REMARKS
03-22-92	1735	ELT/EPIRB	ELT at Santa Barbara Airport
03-31-92	1742	Carrier	Unknown source.
04-15-92	1203	ELT/EPIRB	Aircraft crash at Santa Barbara Airport.
04-15-92	1428	ELT/EPIRB	ELT at Santa Barbara Airport.
04-21-92	1756	ELT/EPIRB	Offshore moving.
04-22-92	1039	ELT/EPIRB	406 MHz EPIRB aboard James Patrick under way in Santa Barbara Channel.
04-25-92	0722	ELT/EPIRB	Faded out.
05-05-92	2215	ELT/EPIRB	Aircraft crash east of Camarillo Airport.
05-08-92	1632	ELT/EPIRB	406 MHz EPIRB offshore.
05-18-92	0908	ELT/EPIRB	EPIRB on board Batteau Ivre at Santa Barbara Harbor.
05-23-92	1450	ELT/EPIRB	Unknown source.
05-26-92	1215	ELT/EPIRB	ELT at Santa Barbara Airport.
05-26-92	1513	ELT/EPIRB	Unknown source.
06-26-92	0853	Carrier	Unknown source.
07-05-92	1855	ELT/EPIRB	Capsized trimaran S of San Miguel Island
07-07-92	2012	Carrier	Offshore.
07-14-92	1011	Carrier	FAA Communications site on La Cumbre Peak.
07-22-92	1928	ELT/EPIRB	Portable ELT located at Pepper Tree Motor Inn, Santa Barbara.
07-26-92	2156	ELT/EPIRB	Faded out.
07-27-92	1245	ELT/EPIRB	EPIRB at Santa Barbara Harbor on board Batteau Ivre.
07-29-92	1503	ELT/EPIRB	Airborne.
08-02-92	1145	Carrier	Navy Task Force off Mexico, "operating on a frequency near 121.5 with bleed-over on 121.5." On for over 24 hours.
08-03-92	1017	ELT/EPIRB	Unknown; possibly Santa Barbara Airport.
08-05-92	1417	ELT/EPIRB	ELT at Santa Barbara Airport.
08-07-92	1208	Carrier	Very strong airborne moving.
08-10-92	0723	ELT/EPIRB	Unknown; possibly Santa Barbara Harbor.
08-17-92	1005	ELT/EPIRB	406 EPIRB at Santa Barbara Harbor on board Miss Jessica.

Attachment 2.

L-Tronics, formed in 1974, is a manufacturer of direction finding equipment used principally for the location of aircraft ELTs and marine EPIRBs. The equipment is in use by civil and military agencies worldwide. Both partners, Lou Dartanner and Bruce Gordon, have been active CAP members since 1963 serving in all air and ground field specialties, as mission coordinators and as Emergency Service officers for the State of California. They have written substantial portions of the national training manual for ELT search. They are also radio amateurs active in the Amateur Radio Emergency Service (ARES). The company built the monitor equipment for the successful airport ELT monitor program run by the FCC for the Interagency Committee for Search and Rescue (ICSAR).

The **Santa Barbara Amateur Radio Club** was founded in 1920 and currently has over 400 members. The club has a major interest in emergency services. In coordination with the state and local government, it operates two 144 MHz and three 220 MHz repeaters, one of which is solar powered on an offshore island. It also operates a fully equipped emergency communications van. It has about 50 active ARES members and routinely responds in 30 minutes or less to support the Los Padres Search and Rescue team and other government agencies.